

### Energy Saver Thermostat

The controller is capable of controlling and monitoring numerous inputs and outputs. A 24V AC output is used for staged heating or a 2-10 VDC output for modulated heating and has 24 VAC output for cooling functions.

The ES controller is unique by allowing the user limited adjustments, which include a temperature varying slide switch and a timed occupied override switch. By moving the slide switch up or down the user can vary the temperature  $\pm 3\text{ }^{\circ}\text{C}$  /  $\pm 5^{\circ}\text{F}$  from the programmed set points.

Pressing the timed occupied switch will enable occupied mode. The thermostat will remain in the occupied mode for the programmed duration, up to 240 minutes, then return to normal operation. All other variable parameters are programmable by using a handle programmer (sold separately).

The ES thermostat will now include the ability to be occupied or unoccupied during the weekends as well as have three independent holiday schedules. Each of these holiday schedules is programmable by using a Handheld Programmer - Rev 1.2 + (sold separately). The user simply enters the start and end days which they would like the holidays to run between. Three of these were proved prima rely to help schools during their extended holidays (spring, summer and Christmas).

Some of the optional accessories available to further improve efficiencies include a discharge air temperature sensor (currently available for modulated hydronic heat only) and a motion detector used to detect occupancy. The room temperature sensor which is normally housed within the thermostat can be remotely mounted. These are just a few of the possibilities that can be implemented into a HV AC control package. If there is a requirement for a special control application please contact us and we will tailor one to suit your needs.



The ES thermostat is a programmable HVAC controller specifically designed to control unit ventilators. It has the ability to control virtually any type of heating and cooling sources available in the industry.

#### Features include:

- **Timed occupied switch** programmable to weekends as three independent holiday schedules.
- **Adjustments** include a temperature varying slide switch and a timed occupied override switch.
- **Control and monitor** numerous inputs and outputs.
- **Optional sensors** include discharge air temperature sensor and motion detector.

## Energy Saver Thermostat



### OPTIONS

**Remote**  
Remotely mount temperature sensor outside of controller.

**Motion Sensor Input**  
Sense for occupancy via normally closed contact to ground.

**Discharge Air Temperature**  
Monitors air exiting the HVAC unit and adjusts heat output automatically (Available only on hydronic modulated units).

If your application requires a special input or output please contact us

### ELECTRICAL

Input	24 VAC @ 350mA
Outputs	2-10 VDC @ 7mA 12 VDC @ 250mA
Battery Backup	Lithium Coin Battery 3 Year Life
Relays	6 Normally Open Contacts 30 VDC @ 1A
Wiring	18-22 AWG stranded or solid copper wire 5-conductor shielded 24 AWG stranded for temperature probes

### MISCELLANEOUS

Dimensions	6.2"h x 3.0"w x 1.6"d
Warranty	1 year parts and labour

### PRODUCT FEATURES

**Heating**  
24 VAC Outputs or 2-10 VDC Modulated

**Cooling**  
24 VAC Output w/ 5 minute Cycle Protection

**Occupancy Override**  
120 minutes standard, 40 minutes for motion detection equipped units.  
(Changeable via Handheld Programmer v1.1+)

**Auto Season Changeover**  
Switches between heat and cool automatically.

**Temperature Differential**  
 $\pm 1^{\circ}\text{C}$  /  $\pm 2^{\circ}\text{F}$

**Update Interval**  
Once a minute

**Liquid Crystal Display (LCD)**  
Displays operating functions, time and present temperature.

**Temperature Adjustment Slider**  
Adjustment for  $\pm 3^{\circ}\text{C}$  /  $5^{\circ}\text{F}$  from set points.

**24 Hour Clock**  
Time, Date and Day of the Week. Automatically corrects time during daylight savings. Battery backup provides retention of all programmed variables including time and calendar.

**Programmable Settings**

- Occupied Heat and Cool Temperature
- Unoccupied Heat and Cool Temperature
- Start and End Occupied Time
- Pre-Condition Start Time
- Discharge Air Temperature
- Time
- Calendar
- Daylight Saving Time
- Time Occupied Duration
- Weekend Occupancy
- 3 Independent Holiday Schedules

Specifications are subject to change without notice.